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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,091	06/29/2000	Shuichi Takayama	43889-960	7722

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EXAMINER

KIM, KENNETH S

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,091

Applicant(s)

TAKAYAMA ET AL.

Examiner

Kenneth S KIM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-9 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9,12-15 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 16-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

KENNETH S. KIM
PRIMARY EXAMINER

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. Claims 1-4, 6-9, and 12-21 remain for examination.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6-9, 12-15, and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Butts, Jr. et al, U.S. Patent No. 4,812,971.

Butts, Jr. et al teaches the invention as claimed in claims 19 –21 including a processor for handling data of multiple size, the processor comprising:

- (a) manipulation means (14, 60) for performing a manipulation on an operand, the manipulation and the operand being specified by an instruction (col. 3, lines 26-28), the manipulation means having a bit width corresponding to a maximum one of the multiple sizes (col. 8, line 38)),
- (b) manipulation control means for enabling only a part of the manipulation means that is associated with the data size of the specified operand (col. 8, line 58),

(c) wherein the manipulation means comprises register means for retaining operand data (col. 8, lines 15, 28 and 43) and size information about the size of the operand data (col. 8, line 49),

(d) wherein if the manipulation control means has decoded a first instruction requesting that operand data of a particular size be written on the register means and has obtained size information about the data size of the operand specified by the first instruction (col. 3, line 64; col. 8, line 65), then the manipulation control means retains not only the operand data but also the size information (col. 8, line 67) – claim 20,

(e) wherein if the manipulation control means has decoded a second instruction (col. 9, line 12) requesting that the operand data retained in the register means be referred to (col. 9, line 15), then the manipulation means read out size information about the size of the operand data (col. 9, line 19), as well as the operand data itself, from the register means, and enabling only a part of the manipulation means that is specified by the size information read out from the register means (col. 9, line 8) - claim 21, and

further teaches as in claims 1-4, 6-9, and 12-15,

(f) wherein the manipulation means comprises an ALU (104; col. 8, line 14) based on claim 1 corresponding to (a) to (e) above and carry information conveying means (see Nakamura) – claims 2-4,

(g) bus means for transferring operand data (18) and latch means (64) – claims 6-8,

(h) wherein the processor is a RISC type (can be any type) – claim 9,

(i) wherein the first instruction is a memory load (col. 9, line 12) or an immediate operand data transfer instruction (col. 3, line 30) – claim 12,

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(j) wherein the second instruction does not contain any information specifying the size of the operand (col. 9, line 19) – claims 13 and 14, and

(k) wherein if the manipulation means decoded a third instruction to obtain new size information and modifies the size information retained in the register means (col. 9, line 1) – claim 15.

4. Applicant's arguments with respect to claims 1-4, 6-9, 12-15, and 19-21 have been considered but are moot in view of the new ground(s) of rejection.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

MacGregor et al taught a method of controlling operand data size.

6. Claims 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth S KIM whose telephone number is (703) 305-9693. The examiner can normally be reached on M-F (8:30-17:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


KENNETH S. KIM
RECEIVED